

## Laser Diode Test System LIV120



### Highlights:

- High throughput
- Pulsed, QCW and CW
- LIV and Burn-In

### Our offer in Detail:

The LIV120 is a versatile but low cost test system for use in the lab as well as for OEM applications. High speed data processing and intelligent hardware architecture allow a wide range of test sequences

- low duty cycle pulsing
- QCW
- hard pulse testing
- soft pulse testing
- true CW operation

This system is, ideal for

- diode characterization
- quality control of incoming goods
- OEM production and testing machines

We offer this instrument with a variety of end stages covering current ranges up to 400A.

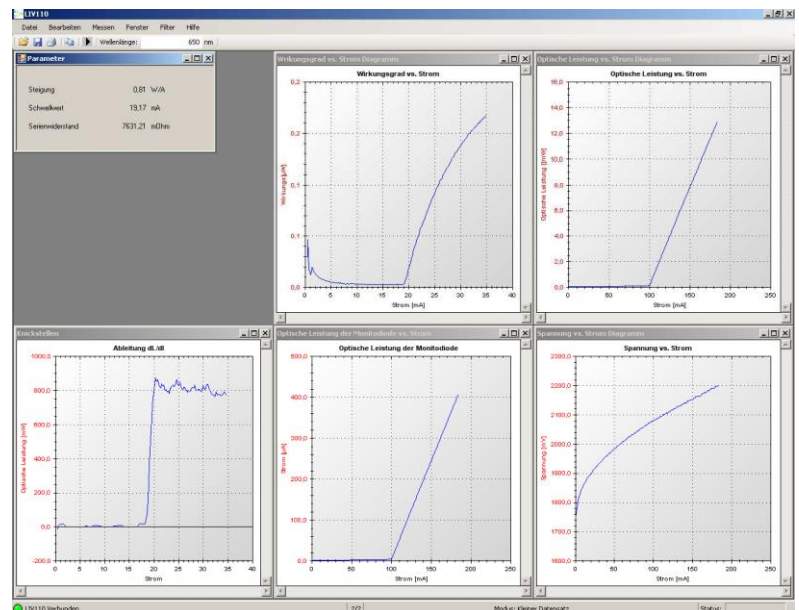
A complete parameter set for a given measurement protocol may be uploaded to the LIV120. The LIV120 then takes over the measurement procedure. The unit drives the laser with the given prescription and performs the data acquisition and storage. Many laser diodes of the same type may now be tested in this manner with very high throughput. The measurement cycle takes less than 1s including the data transfer to the host computer<sup>1</sup>.

### Features

- Spectrum (optional)
- Programmable pre-measurement thermalization
- Pass / fail reporting
- Stop sweep on optical threshold

### Your problem is our challenge – flexibility is our standard:

We will gladly adapt, for example, the wavelength or the current to suit your application. Let us know your requirements.



LIV120-c  
 max. current (c) ←

## Specifications

| Parameter  | Conditions  | Min  | Typ | Max    | Units |
|--|---|--|-----|--------|-------|
| <b>INPUT</b>                                     |   |  |     |        |       |
| Maximum measureable power                        | Depends on the integrating sphere chosen for the application. Please contact us for assistance. |  |     |        |       |
| Monitor Current                                  | Gain 0  | 0.0025   |     | 10     | mA    |
|  | Gain 1  | 0.00025  |     | 1      | mA    |
|  | Gain 2  | 0.025  |     | 100    | μA    |
| <b>OUTPUT</b>                                    |   |  |     |        |       |
| Laser Diode Current<br>(min. value = resolution) | LIV120-50A  | 0.0125   |     | 50     | A     |
|  | LIV120-100A   | 0.025  |     | 100    |       |
|  | LIV120-200A   | 0.05   |     | 200    |       |
|  | LIV120-400A   | 0.1  |     | 400    |       |
| Compliance                                       |   |  | 10  |        | V     |
| Accuracy   |   |  |     | ± 2    | %     |
| Offset   |   |  | 0.1 |        | A     |
| Risetime   | LIV120-100A   |  |     | 200    | μs    |
|  | LIV120-400A   |  |     | 400    |       |
| Pulse Duration                                   | Pulse modes   | 0.5  |     | 60000  | ms    |
| Duty Cycle                                       | Pulse modes   | 0.001  |     | 99.99  | %     |
| Step Length                                      | CW modes  | 0.5  |     | 120000 | ms    |
| Burn-in Duration<br>(with power measurement)     |   | 200  |     |        | μs    |
|  |   |  |     | 11     | days  |
| Number of Measurements per Channel               | LIV modes   | 1  |     | 4000   |       |
| Number of Measurements                           | Burst modes   | 1  |     | 16380  |       |
| Number of Measurement Channels                   |   | 4<br>(optical power, monitor photodiode, laser voltage, laser current) |     |        |       |
| <b>GENERAL</b>                                   |   |  |     |        |       |
| Power Supply                                     | LIV120-50A  | 85-264V / 5A   |     |        |       |
|  | LIV120-100A   | 85-264V / 10A  |     |        |       |
|  | LIV120-200A   | 180-230V / 13A   |     |        |       |
|  | LIV120-400A   | 342-457V / 10A   |     |        |       |
| Communication                                    |   | USB 2.0  |     |        |       |
| Dimensions                                       | LIV120-50A  | 19" rack, 3U   |     |        |       |
|  | LIV120-100A   | 19" rack, 3U   |     |        |       |
|  | LIV120-200A   | 19" rack, 6U   |     |        |       |
|  | LIV120-400A   | 19" rack, 6U   |     |        |       |

<sup>1</sup> Using 10 samples averaging.

Please contact us for customized units.